



V. Databases

B ii – Operations Databases

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Documents

- GSSC Functional Requirements Document
- Mission Operations Concept Document – *includes GSSC Operations Concept*
- GSSC Development Plan (GSSC-0001)
- Verification Matrix (GSSC-0002)
- GSSC Design Document (GSSC-0003)
- GSSC Software Management Plan (GSSC-0004)
- Test Plan (GSSC-0005)
- MOC to GSSC/GIOC/ISOC Operations Data Products ICD (492-MOC-009)



Main GSSC Operations Databases

- Operations Databases can be loosely divided by interfaces
 - Operations Internal Databases
 - Related to Data Transfer from Other Parts of the GSSC
 - Related to Data Transfer from the GIOC and ISOC
 - Related to Data Transfer from the MOC



Operations Internally Generated

- Science Timelines
 - Short term timelines
 - Initial, delivered
 - Long term timelines
 - Delivery records
 - Change records
- TOO Orders
 - Store orders
 - Responses from MOC
- File Transfer Records
 - A large number of different files will be transferred between GLAST elements. Records of all these kept.
- Page/Alert Records
 - Alerts issued
 - Response to alerts
 - Alerts placed “on hold”



Other GSSC Sections

- Accepted Proposal Database
 - Proposal information from RPS (User Support)
 - Proposal database is used by Scheduling Tool in creation of Long Term Schedule and weekly Science Timelines.
 - Record of modifications to database (e.g. proposer gives wrong target coordinates)
- TOO Database/Requests
 - TOO requests from RPS (User Support)
 - Record of disposition of TOO request (accept, reject)



IOC Related

- Command Loads and Disposition Records
 - Files received
 - Acceptance or rejection of commands
 - Commands forwarded to MOC
 - Commands inserted in Science Timeline
- Calibration Observation Requests
 - Via special RPS version



MOC Related

- Ephemerides (TDRSS, GLAST)
 - GLAST ephemeris using in generating Science Timelines.
 - TDRSS ephemerides can be used to maintain pre-scheduled TDRSS contacts or facilitate new contacts.
- TDRSS Contact Schedule
 - When TDRSS is scheduled any subsequent changes to Science Timeline will avoid loss of contacts.
- As-Flown Timeline
 - Record of observations as actually done by GLAST
 - Check for differences caused by ARs & TOOs and record
- Observatory Timeline
 - Includes spacecraft commanding.
- Anomaly Reports